

## ICU GUIDELINE: ADJUSTING GOAL FEED RATES IN THE PATIENT RECEIVING A PROPOFOL INFUSION

Propofol is a lipid solution containing 1.1 kcal /mL. When provided at an infusion rate exceeding 10 mL/hr, the caloric value of the propofol in combination with tube feeds can lead to significant overfeeding. Overfeeding is associated with hyperglycemia, fatty liver, hypertryglyceridemia, and excess CO<sub>2</sub> production. In order to prevent overfeeding and ensure optimal protein is provided, tube feed rate and protein powder flushes should be adjusted.

# ADJUST FEED RATE ONLY IF ALL OF THE FOLLOWING CRITERIA ARE MET

- Propofol provided as an hourly infusion (not as bolus doses).
- Propofol infusion expected to continue for an additional 24 hrs or more.
- Propofol average hourly infusion rate > 10 mL/hr.

# IF ALL OF THE ABOVE CRITERIA MET, PROCEED AS FOLLOWS

### A) ADJUST FEED RATE AND ADD PROTEIN POWDER AS REQUIRED:

In order to prevent overfeeding and ensure adequate provision of protein, adjust feed rate and add protein powder based on the Propofol infusion rate.

If the Propofol infusion rate is frequently being adjusted, recommend adjusting feeds/protein provision once per day (suggest during morning rounds based on the Propofol infusion rate at that time).

See Table 1 on page 2 for guidance on feed/protein adjustments.

### B) DOCUMENTATION OF FEED RATE AND PROTEIN DOSING:

Goal feed rate to be ordered in Cerner. Protein powder to be ordered as "Enteral protein supplement".

Protein powder administration and hourly feed rate are to be documented in Interactive View and I&O.

### C: MONITORING

Because high dose infusions of lipid solutions can lead to hypertriglyceridemia, obtain physician order for triglyceride levels every Monday/Thursday while on Propofol infusion.

#### TABLE 1: GUIDELINE FOR FEED ADJUSTMENT AND PROTEIN POWDER ADDITION FOR PATIENTS RECEIVING A PROPOFOL INFUSION

Propofol infusion rate (mL/hr)*	Formula: 1-1.5 kcal/mL (eg. Isosource 1.2 <sup>®</sup> , Isosource HP 1.0 <sup>®</sup> , Vital Peptide 1.5 <sup>®</sup> , or any mixture of formulas)	Formula: 2 kcal/mL (eg. Novasource Renal <sup>®</sup> , Resource 2.0 <sup>®</sup> )	Protein powder <sup>†</sup> (Beneprotein)
0-10	No change to feed rate or protein powder dosing		
10.1-20	Decrease goal feed	Decrease goal feed	Add 4 packages
	rate by 15 mL/hr	rate by 10 mL/hr	daily
20.1-30	Decrease goal feed	Decrease goal feed	Add 5 packages
	rate by 20 mL/hr	rate by 15 mL/hr	daily
30.1-40	Decrease goal feed	Decrease goal feed	Add 8 packages
	rate by 30 mL/hr	rate by 20 mL/hr	daily
40.1-50	Decrease goal feed	Decrease goal feed	Add 10 packages
	rate by 40 mL/hr	rate by 25 mL/hr	daily
Equal to or above 50.1	Decrease goal feed	Decrease goal feed	Add 12 packages
	rate by 50 mL/hr	rate by 30mL/hr	daily

## Regardless of Propofol infusion rate, do not reduce feed rate below 10 mL/hr

\*Note: Propofol infusion rate is mL/hr (NOT mcg/kg/min)
<sup>†</sup>Note: Protein powder is in addition to protein powder prescribed with goal tube feeds

- If tube feeds are already at goal rate when Propofol infusion is started, decrease rate as per table and add corresponding number of protein powder packages
- If tube feeds have just started, increase as per protocol only up the goal rate minus the adjustment for Propofol. (Eg. If goal rate is 1:1 Resource 2.0:Isosource HP 1.0 at 50mL/hr and Propofol is at 25mL/hr, advance feeds per protocol to 30mL/hr and add 5 packages of protein powder daily)

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